plete tube, which is known as *the proboscis,* and which, when not in use, is curled up spirally, looking like a watch-spring. At

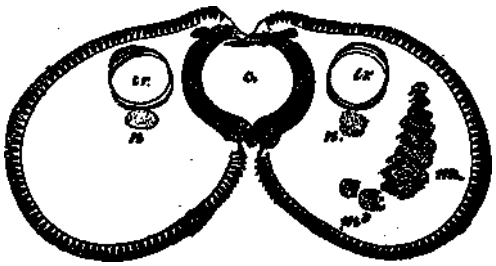

FIG. 30.—Cross-section of the sucking-tube of the milkweed butterfly, to show the way in which the halves unite to form a central canal (*c*); *tr*, tracheae, or air-tubes; *n*, nerves; *w*, *w*3, muscles of one side. (Magnified 125 diameters.) (Burgess.)

the upper end of the proboscis, in the head, is a bulb-like enlargement, in the walls of which are inserted muscles which have

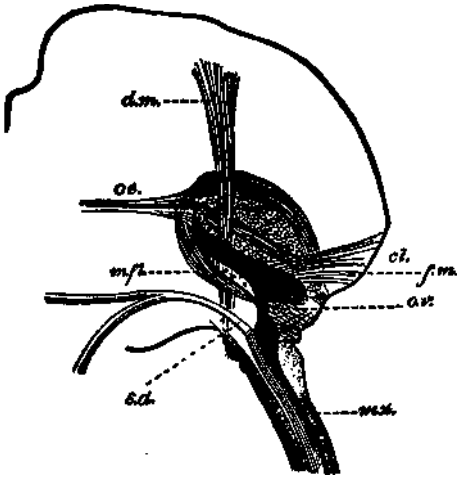

FIG. 31.—Longitudinal section of the head of the milkweed butterfly: *cl*, clypeus; *mx*, left maxilla, the right being removed: *mfl*, floor of mouth; *œ*, œsophagus, or gullet; *o-o*, mouth-valve; *sd*, salivary duct; *dm* and *fm*, dorsal and frontal muscles, which open the sac. (Magnified 20 diameters). (Burgess.)

their origin on the inner wall of the head. When these muscles contract, the bulb-like cavity is enlarged, a vacuum is produced,